

**REMARKS**

Claims 1, 4, 6, 8, 24 and 25 are pending in this application. Applicants respectfully submit that claims 1, 4, 6, 8, 24 and 25 are allowable for at least all the reasons discussed in the March 1, 2010 Request for Reconsideration (Request) and, further, for the additional reasons discussed below. Accordingly, reconsideration and allowance are respectfully requested.

**I. Personal Interview**

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Gugliotta and Examiner Sample during the March 12, 2010 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

**II. Rejections Under 35 U.S.C. §103**

**A. Ishihara, Shaffer, and Hamanaka**

The Office Action rejects claims 1, 4, 6, 8, 24 and 25 under 35 U.S.C. §103(a) as having been obvious over Ishihara, as evidenced by Shaffer, in view of Hamanaka. In addition to the reasons discussed in the Request, Applicants respectfully traverse the rejection for the additional reasons discussed below.

As discussed on page 2 of the Request, the Young's Modulus of a material is not necessarily a function of the porosity of the material. During the interview, Examiner Gugliotta asserted that the specification appears to keep the particle size and auxiliary agent variables constant and changes only the porosity of the plugging material. Examiner Gugliotta referenced page 9, lines 13-27, of the specification in the support of this assertion. Examiner Gugliotta further asserted that because porosity is the only variable, and all other variables remain constant, a higher porosity would necessarily lead to a lower Young's Modulus in the plugging material. Applicants respectfully disagree with this assertion.

The specification, at page 9, lines 13-27, does not suggest that the particle size and the auxiliary agent variables are kept constant. In fact, the specification recites that "when the Young's Modulus is lowered for use by the increase of the porosity or the like, the end face of the honeycomb structure can be inhibited from being cracked." See specification at page 9, lines 24-27. The term "or the like" suggests that the Young's Modulus of a material is not only controlled by porosity but also by other variables. See Attachment (showing that, in addition to porosity, other variables affect the Young's Modulus). Accordingly, in contrast to Examiner Gugliotta's assertion discussed above, the specification suggests that altering porosity is merely one method, among many methods, for lowering the Young's Modulus of a material. Thus, an ordinarily skilled in the art would recognize that a higher porosity would not necessarily lead to a lower Young's Modulus.

Additionally, Tables 1 and 2 in the Examples section of the specification further show that the porosity of the plugging material was not the only variable in the experiments. For example, plugging materials A, B, C and D had varying SiC powder average particle diameters and pore forming agent amounts. See Table 2. Each plugging material A, B, C and D exhibited different Young's Modules values. Thus, the specification does not keep the particle size and auxiliary agent variables constant, and a higher porosity does not necessarily lead to a lower Young's Modulus in the plugging material. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**B. Ichikawa, Shaffer, and Hamanaka**

The Office Action rejects claims 1, 4, 6, 8, 24 and 25 under 35 U.S.C. §103(a) as having been obvious over Ichikawa, as evidenced by Shaffer, in view of Hamanaka. Applicants respectfully traverse the rejection for the reasons discussed in the Request and for the additional reasons discussed above with respect to Ishihara, Shaffer and Hamanaka. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**C. Hijikata, Shaffer, and Ichikawa**

The Office Action rejects claims 1, 4, 6, 8, 24 and 25 under 35 U.S.C. §103(a) as having been obvious over Hijikata, as evidenced by Shaffer in view of Ichikawa. Applicants respectfully traverse the rejection for the reasons discussed in the Request and for the additional reasons discussed above with respect to Ishihara, Shaffer and Hamanaka. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 4, 6, 8, 24 and 25 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:TTK/mms  
Attachment:  
Figure

Date: April 30, 2010

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